# UNITED STATES DEPARTMENT OF AGRICULTURE

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# NATIONAL ADVISORY COMMITTEE ON

#### MICROBIOLOGICAL CRITERIA

FOR FOODS

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PLENARY SESSION

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FRIDAY,

MARCH 24, 2006

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The meeting convened in the F. Scott Fitzgerald Salon C of the Westin Arlington Gateway, 801 North Glebe Road, Arlington, Virginia, 22203, at 8:32 a.m., pursuant to notice, Robert E. Brackett, Ph.D., Vice-Chair, presiding.

### EXECUTIVE COMMITTEE MEMBERS PRESENT:

ROBERT E. BRACKETT, PH.D.

Vice-Chair

CURT MANN, D.V.M.

Representing the Chair

LEEANNE JACKSON, PH.D.

FDA Liaison

BRADFORD W. HILDABRAND, D.V.M., M.V.P.M.

Defense Department Liaison

DAVID GOLDMAN, M.D., M.P.H.

FSIS Liaison

GERRI RANSOM, M.S.

Executive Secretariat

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#### COMMITTEE MEMBERS PRESENT:

- DR. DAVID ACHESON
- DR. LARRY BEUCHAT
- DR. KATHRYN BOOR
- DR. SCOTT BROOKS
- DR. DANIEL ENGELJOHN
- DR. TIMOTHY FREIER
- DR. LINDA HARRIS
- DR. WALT HILL
- DR. MICHAEL JAHNCKE
- DR. LEE-ANN JAYKUS
- LTC.ROBIN KING
- MS. BARBARA KOWALCYK
- DR. JOHN KVENBERG
- DR. JOSEPH MADDEN
- DR. ALEJANDRO MAZZOTTA
- DR. ANN MARIE MCNAMARA
- DR. JIANGHONG MENG
- DR. DALE MORSE
- MS. ANGELA RUPLE
- DR. DONALD SCHAFFNER
- MS. JENNY SCOTT
- DR. JOHN SOFOS
- DR. STERLING THOMPSON
- DR. IRENE WESLEY
- DR. DONALD ZINK

#### ALSO PRESENT:

TONY CORBO

CAROLINE SMITH DEWAAL

ROBERT G. HIBBERT

# A-G-E-N-D-A

	Page No.
Introductory Remarks	4
Subcommittee on Determination of Cooking Parameters for Safe Seafood for Consumers Report, MS. ANGELA RUPLE	15
Subcommittee on the Assessment of the Food Safety Importance of <i>Mycobacterium avium</i> subspecies <i>paratuberculosis</i> Report, DR. DAVID ACHESON	21
Subcommittee on Consumer Guidelines for the Safe Cooking of Poultry Products Report,  DR. DANIEL ENGELJOHN	28
Public Comment, ROBERT G. HIBBERT  TONY CORBO  CAROLINE SMITH DEWAAL	59 61 63

1	P-R-O-C-E-E-D-I-N-G-S
2	8:32 a.m.
3	VICE-CHAIR BRACKETT: Good morning,
4	everybody. It's 8:30, so if you could take your
5	seats, please, we'll begin.
6	Well, good morning, and welcome to
7	today's plenary session of the 2004-2006 National
8	Advisory Committee on Microbiological Criteria for
9	Foods. I'm Dr. Bob Bracket, Vice-Chair of the
10	Committee, and Director of FDA's Center for Food
11	Safety and Applied Nutrition.
12	Unfortunately, our Chair, Dr. Raymond,
13	Under Secretary for Food Safety at the United
14	States Department of Agriculture, is unable to be
15	with us due to another obligation, and he does send
16	his regrets, but in his absence we have Deputy
17	Under Secretary for Food Safety at USDA, Dr. Curt
18	Mann to my left here, and I would like to welcome
19	Curt to our meeting.
20	Curt, do you have any comments?
21	DR. MANN: Yes, I'm just glad to be
22	here. I've never been to one of your meetings. I
23	look forward to just sitting in, and listening, and
24	learning.

Dick Raymond wanted me to send his regrets he couldn't be with you. He's just in a

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1	very short time grown to appreciate and know the
2	value of this Committee, and also I'm just recently
3	reminded by the words of our President that,
4	"Service to the Nation is very, very important,"
5	whether you wear a uniform, or if you mentor a
6	child, and I think advisory committees are service
7	to the nation. So, I look forward to today and
8	thank you all.
9	VICE-CHAIR BRACKETT: Thank you, Curt.
10	To continue, I want to mention that our
11	2004 to 2006 Committee has been quite busy during
12	this term, assisting our participating food safety
13	agencies with a variety of very complex food safety
14	issues.
15	Our members are providing an invaluable
16	service, as Curt just mentioned, in lending their
17	expertise to our Nation's food safety programs.
18	I want to commend the Committee on the
19	hard work that goes into the scientific advice that
20	they generate, and for the important role that they
21	help in providing us with the scientific foundation
22	for regulations and programs aimed at reducing food
23	borne disease and enhancing public health.
24	Preventing and reducing foodborne
25	illness is an evolving challenge, and the reports
26	that the Committee adopts are a vital part of our

1	success in this area. These reports serve as part
2	of our basis for science-based decision making, and
3	provide us with the latest information and direct
4	us to where important data and information gaps do
5	exist.
6	On behalf of the full Committee and the
7	Federal agencies that sponsor the National Advisory
8	Committee for Microbiological Criteria for Foods,
9	I'd like to thank each of you for your continued
10	service, and the valuable time that you spend in
11	volunteering in support of the activities of this
12	Committee.
13	At this time, I'd like to go around the
14	table and have Committee members introduce
15	themselves and state their affiliations, and just
16	throughout this entire morning what I would ask is,
17	make sure that you have your microphones turned or
18	for our reporter, and also state your name when you
19	do say anything.
20	So, at this point, I'd like to start
21	with introductions, and we'll start with Dr.
22	Schaffner.
23	DR. SCHAFFNER: Don Schaffner, Rutgers
24	University.
25	DR. KVENBERG: John Kvenberg, Food and
26	Drug Administration.

1	DR. MADDEN: Joseph Madden.
2	DR. McNAMARA: Ann Marie McNamara,
3	Siliker.
4	DR. MAZZOTTA: Alejandro Mazzotta with
5	McDonald's Corporation.
6	LTC. KING: Robin King, DoD, Veterinary
7	Services Activity.
8	DR. THOMPSON: Sterling Thompson, the
9	Hershey Company.
10	DR. HARRIS: Linda Harris, University of
11	California, Davis.
12	DR. BEUCHAT: Larry Beuchat, University
13	of Georgia.
14	DR. WESLEY: Irene Wesley, U.S.
15	Department of Agriculture, National Animal Disease
16	Center, Ames, Iowa.
17	DR. MENG: Jianghong Meng, University of
18	Maryland.
19	DR. SOFOS: John Sofos, Colorado State
20	University.
21	DR. FREIER: Tim Freier with Cargill.
22	DR. ACHESON: David Acheson, FDA.
23	MS. RUPLE: Angela Ruple, U.S.
24	Department of Commerce, NOAA Fisheries.
25	DR. JAHNCKE: Michael Jahncke, Virginia
26	Tech.

1	DR. JAYKUS: Lee-Ann Jaykus, North
2	Carolina State University.
3	DR. ENGELJOHN: Dan Engeljohn, U.S.
4	Department of Agriculture, Food Safety Inspection
5	Service.
6	MS. KOWALCYK: Barbara Kowalcyk, Safe
7	Tables Our Priority.
8	DR. ZINK: Don Zink, Food and Drug
9	Administration.
10	DR. MORSE: Dale Morse, New York State
11	Department of Health.
12	DR. BROOKS: Scott Brooks, E&J Gallo.
13	DR. BOOR: Kathryn Boor, Cornell
14	University.
15	DR. HILL: Walt Hill, Institute for
16	Environmental Health.
17	MS. SCOTT: Jenny Scott, Food Products
18	Association.
19	LTC. HILDABRAND: Brad Hildabrand, DoD,
20	Veterinary Service Activity.
21	DR. JACKSON: LeeAnne Jackson, FDA,
22	Liaison to the Executive Committee.
23	DR. GOLDMAN: I'm David Goldman, Office
24	of Public Health Science at the Food Safety and
25	Inspection Service.
26	EXECUTIVE SECRETARIAT RANSOM: Gerri

1	Ransom, Food Salety and Inspection Service, NACMOR
2	Executive Secretariat.
3	VICE-CHAIR BRACKETT: Okay, at this
4	point I would to take a sort of sidestep here. I
5	just want to note that we have a special guest with
6	us this morning, and many of you know him, and
7	that's Dr. Merle Pierson, who is a past National
8	Advisory Committee Chair from 2002 to 2005, and
9	currently he is now the USDA Deputy Under Secretary
10	for Research, Education and Economics.
11	And, Dr. Pierson if you could come up
12	here, please, we would like to present you with our
13	appreciation for the service that you have done.
14	For those of you who don't know Dr. Pierson, when
15	the history of this Committee is written he will
16	probably be the primary author, because he's been
17	here from the very beginning, but what we would
18	like to do is give you in appreciation a
19	certificate that the sponsoring agencies have
20	provided and that the Executive Committee would
21	like to give you to thank you for the service and
22	your commitment to that Committee, and your
23	participation is very appreciated by all the
24	Committee.
25	(Applause.)
26	VICE-CHAIR BRACKETT: I will read the

1	certificate so people know what, this says, "United
2	States Department of Agriculture Certificate of
3	Appreciation for Work You've Done, Merle Pierson,
4	for your dedication and service as the Chair of the
5	National Advisory Committee for Microbiological
6	Criteria from 2002 to 2005." This has been almost
7	a career for you.
8	DR. PIERSON: I can't help but say just
9	briefly wonderful friend but John, you've
10	been on this Committee longer than I have. I know
11	several of you have been on this a long time, and
12	I'll just say it's a fantastic committee, highly
13	respected, highly regarded and very, very much
14	appreciated. I think it's one of the, if not the,
15	top-notch advisory committees.
16	So, thank you very much.
17	(Applause.)
18	VICE-CHAIR BRACKETT: Thanks much,
19	Merle.
20	At this time, I'd like to turn over the
21	floor to Gerri Ransom, our Executive Secretary, who
22	will provide some additional information.
23	Gerri?
24	EXECUTIVE SECRETARIAT RANSOM: Good
25	morning, and again, welcome. As always, if anyone
26	needs any assistance please let myself or Karen

1	know, and if your red light is on your microphone
2	is working, so if you'd look for that.
3	A quick mention on some meeting
4	procedure for today. If you would like to
5	participate in discussions, please take your name
6	tag and set it vertically, and the Vice-Chair will
7	be alerted that you would like to speak.
8	For any guests wishing to make public
9	comment today, we ask that you please register out
10	at our front table. We have a sign-up sheet out
11	there, and we are allotting each guest ten minutes
12	for comments, so please make sure you do that.
13	I also want to point out to our guests
14	that we do have a table set up front, where we have
15	made available documents relating to NACMCF work,
16	so please make sure and stop by and pick up
17	documents that interest you.
18	Related to NACMCF business, I have a
19	few updates I'd like to mention regarding the
20	status of a couple of NACMCF committee reports. The
21	report, "The Analytical Utility of Campylobacter
22	Methodologies" is in final stages of preparation
23	for posting on the FSIS website, and also for
24	submitting to the <u>Journal of Food Protection</u> , so we
25	are going to see that happen very soon.

report,

"Requisite Scientific

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1	Parameters for Establishing Equivalence of
2	Alternative Methods of Pasteurization," that has
3	been available on the FSIS website, has been
4	accepted by the Journal of Food Protection, and
5	should publish in the May issue.
6	Now, we are rapidly moving through the
7	2004-2006 NACMCF term. The current Committee
8	charter will expire September 23 <sup>rd</sup> . We've already
9	initiated Committee renewal paperwork, and our
10	recharter packet is in-process.
11	The majority of current NACMCF members
12	are eligible to return for another term, but new
13	work will dictate what specific expertise will be
14	sought for the 2006-2008 Committee. The NACMCF
15	Executive Committee plans to meet in approximately
16	30 days to make decisions on new work for the
17	Committee, and also to review our budget for the
18	remainder of this fiscal year. At that time, the
19	Board is going to decide if we are going to have
20	another week of meetings and plenary session, or
21	whether we'll have separate subcommittees meet.
22	A couple of administrative notes.
23	Please check your entries on your particulars in
24	the meeting notebook to make sure we are up to date
25	on your contact information, and let Karen know if
26	there's any problems with that and we'll make

1	corrections.
2	And finally, very importantly, please
3	fill out your travel expense sheets that are found
4	in the back of your notebook as soon as you can,
5	and get the required receipts to Karen, and we'll
6	work on your reimbursement.
7	You have our sincere apologies for any
8	delays that we've experienced on reimbursements for
9	past travel. We have dealt with a garden variety
10	of problem circumstances, but we hope we've got the
11	bugs worked out.
12	I hope you have an enjoyable meeting
13	today, and thank you, and I'm now going to return
14	the floor back to Dr. Bracket.
15	VICE-CHAIR BRACKETT: Thank you, Gerri.
16	And, one thing I missed is that we do
17	have one person on the phone, and if you could
18	introduce yourself, please, Patty. Can you hear
19	me? What I'm hearing is that and also I'm
20	reminded, if you could please speak as directly
21	into your microphone as you can, because we are
22	not hearing anything we'll see if we can fix
23	that as we move on, but they are having trouble

Moving on, I'm pleased to report that

microphone, so we'll try to fix that.

24

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hearing unless you are talking directly into the

1	all three of our active, subcommittees, have made
2	strong work progress this week, and these can
3	those of you on the phone hear us?
4	Can you hear me, Patty?
5	DR. GRIFFIN: Now I can for the first
6	time.
7	VICE-CHAIR BRACKETT: Okay, good. Well,
8	could you introduce yourself, please?
9	DR. GRIFFIN: Can you say that again?
10	VICE-CHAIR BRACKETT: Can you introduce
11	yourself, please?
12	DR. GRIFFIN: I'm Patricia Griffin from
13	the CDC.
14	VICE-CHAIR BRACKETT: Okay, and we will
15	try to yell into our microphones so that you can
16	hear us.
17	The Subcommittee on Determination of
18	Cooking Parameters for Safe Seafood for Consumers,
19	chaired by Spencer Garrett, and the second one is
20	the Subcommittee on Consumer Guidelines for the
21	Safe Cooking of Poultry Products, chaired by Dr.
22	Dan Engeljohn, and the third one is the
23	Subcommittee on Assessment of the Food Safety
24	Importance of <i>Mycobacterium avium</i> subspecies
25	paratuberculosis, chaired by Dr. Acheson.
26	The Subcommittee on Determination of

1	Cooking Parameters for Safe Seafood for Consumers
2	has had a number of working sessions, which will
3	result in valuable information to consumers on how
4	to cook seafood safely. Spencer Garrett and his
5	staff were affected by Hurricane Katrina, but they
6	are back with us, and bouncing back and I am happy
7	to report, and so at this time what I'd like to do
8	is turn the floor over to, actually, Angela Ruple,
9	Spencer Garrett had to leave yesterday, so Angela
10	is going to provide us with an update on the
11	subcommittee's work.
12	MS. RUPLE: Thank you, Dr. Brackett.

hank you, Dr. Brackett.

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First of all, I'd like to thank the subcommittee members, as Dr. Brackett said, we had several sessions. We had at least three face-toface meetings that were either one or working sessions, so the subcommittee has put forth a lot of time and effort on this charge, and we feel like we are making very good progress.

You should each have before you a copy of Spencer's report on the subcommittee. You can read that at your leisure.

What I would like to do this morning is just kind of hit some of the high points on what the Committee is working on, the approach that we are taking, and where we expect to go with this

1	charge.
2	You can read the background, but,
3	obviously, there is a definite need for consumers
4	to be able to determine whether a seafood product
5	is cooked.
6	Can you hear, Patty? Is this any
7	better, can you hear me?
8	DR. GRIFFIN: I can hear you, I can't
9	hear the speakers.
10	VICE-CHAIR BRACKETT: That was the
11	speaker.
12	DR. GRIFFIN: I can hear better now.
13	VICE-CHAIR BRACKETT: Okay.
14	DR. GRIFFIN: I can just hear now.
15	MS. RUPLE: Okay, I'll try to talk into
16	the microphone.
17	First off, I'd like to read, I think
18	most of you are familiar with the Committee's
19	charge, but I'd like to read that once again.
20	Our charge is to determine the minimum
21	requirements for achieving microbiologically safe
22	cooked seafood and the associated methods for
23	objective measurement of the cooking.
24	We were directed to assess all
25	pathogens of concern, bacteria, viruses and
26	parasites, also associated heat labile toxins, if

1	applicable, and various seafood cooking methods
2	that may be used by the consumer.
3	Specifically, the subcommittee was
4	asked to address seven questions, and these are
5	also listed on your handout, but I think it would
6	be worthwhile just running through those questions
7	quickly.
8	What pathogens and parasites are of
9	concern in seafood purchased by consumers?
10	Do cooking methods differ in their
11	ability to eliminate the identified organisms?
12	Do the cooking requirements differ by
13	type of seafood, for example, fin fish, molluscan
14	shell fish, or crustaceans?
15	What effect, if any, does the condition
16	
17	DR. GRIFFIN: We're only getting half
18	the words. If you could call me back.
19	VICE-CHAIR BRACKETT: Can you on the
20	phone hear me when I'm saying this?
21	DR. GRIFFIN: I haven't gotten anything
22	in writing about the Committee work.
23	VICE-CHAIR BRACKETT: We're going to try
24	to have to cut them off, yes, they are not
25	Go ahead, Angela.
26	MS. RUPLE: We were also asked to look

1	at what effect, if any, does the condition of the
2	seafood when purchased, for example, whether it's
3	raw, cooked, frozen, have on the cooking treatment
4	required, and to determine if there is a single
5	temperature that will ensure safe seafood.
6	We were also asked to determine if
7	there are other consumer methods of preparing
8	seafood that need to be addressed. And, as an
9	example of this, we were told to look into things
10	like using lime juice in cerviche, where consumers
11	often think that this results in a cooked product.
12	And also, should consumer advice vary
13	based on any susceptible, at-risk population?
14	We've spent a great deal of time
15	addressing these questions, and at the last plenary
16	session we asked for some clarification, and it was
17	determined that our document will address
18	biological pathogens only, for example, viruses,
19	bacteria and parasites, and we would exclude any
20	chemical pollutants at this time, and that the
21	document will focus on microbiological hazards
22	reasonably likely to occur in specific raw seafood
23	commodities.
24	I'd just like to now briefly tell you
25	where we are in addressing this charge. One of the
26	first things that we've done is to obtain

epidemiological data from CDC, as well as from the
Center of Science and the public interest. We are
now in the process of examining that data to
determine what the most relevant pathogens are, and
what the frequency of occurrence and the location
of these pathogens might be.

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The second thing that we have spent some time on is to discuss the different methods of cooking. We defined different methods of cooking and preparing seafood, and we are in the process of comparing these to determine what the similarities and differences are, and how they affect the pathogens present in the seafood.

Our main emphasis has been in Listeria monocytogenes recognizing that is the hardiest of the vegetative bacterial pathogens associated with seafoods. We are in the process of reviewing thermal inactivation data of Listeria monocytogenes, particularly, in the commodities that we are addressing.

So, we've obtained data and we are now in the process of evaluating the methods that were used to determine the D and Z values that we're looking at to determine if they were determined by similar methodologies, so that we can make a decision on whether they can be compared.

1	We will also look at thermal
2	inactivation, similar thermal inactivation review
3	for viruses in molluscan shell fish, as well as
4	parasites.
5	The last area that we are focusing some
6	time and attention on is, perhaps, the most
7	difficult, and that is investigating ways to
8	determine, by laboratory means, but most
9	importantly how the consumer can determine the
10	doneness of a seafood product. Our subcommittee is
11	very serious about doing this. I understand that
12	at the last meeting in Miami several of the
13	subcommittee members went out to dinner and
14	thoroughly questioned the restaurant staff on how
15	they determined if their seafood was cooked.
16	We've also been in contact with
17	culinary institutes to determine how they teach
18	their chefs to determine the doneness of seafood.
19	So, we'll take all of this information and,
20	hopefully, be able to provide some advice to the
21	agencies on what type of information the consumer
22	needs to determine whether seafood is cooked.
23	So, that's sort of where we are or
24	this. Where we hope to be is that we feel like we
25	need two more working sessions in order to complete
26	the draft document, and we are very hopeful that

1	the next time we have a plenary session we will be
2	able to provide the draft document to the full
3	Committee for deliberation.
4	That's all I had. If there are any
5	other subcommittee members that would like to add
6	anything, please feel free to do so. Or, if there
7	are any full Committee members that have questions
8	or comments of the subcommittee.
9	VICE-CHAIR BRACKETT: Any questions?
10	And, I would preface, to remind the
11	Committee, too, to keep your comments and questions
12	to what the speakers have just said, and not take
13	the time to do subcommittee work at this meeting.
14	Any comments for Angela?
15	Okay, thank you, Angela.
16	MS. RUPLE: Thank you.
17	VICE-CHAIR BRACKETT: Next, we'll
18	proceed with an update on the assessment of the
19	food safety importance of Mycobacterium avium
20	subspecies paratuberculosis, or MAP, that was
21	chaired by Dr. David Acheson.
22	David?
23	DR. ACHESON: Thank you, Dr. Brackett.
24	Well, the subcommittee met the first
25	time yesterday, and we had an extremely good day.
26	What I'd like to do is to go through

1	briefly a short presentation for the Committee, so
2	that they can see where it is we are going here.
3	Can we back up to the first slide,
4	please? That's not quite where I want to start.
5	Short and sweet, right.
6	Next slide, please.
7	By means of background here, I really
8	want to sort of put this in the context of Johne's
9	Disease, which is an infectious bacterial disease
10	in ruminants, caused by the organism that we are
11	focusing on here.
12	During the course of the discussion, it
13	became clear that even though the focus is on
14	ruminants, particularly cattle, other ruminants are
15	known to carry this organism, particularly goats
16	and sheep, as are wildlife. So, certainly, in
17	terms of the scope of sources, it was already
18	beginning to spread fairly broadly.
19	The fact that Johne's Disease has been
20	spreading slowly through domestic livestock
21	populations for many years, and is continuing to do
22	so, is an important part of where we need to think
23	on this, and in terms of the United States, U.S.
24	dairy cattle represent the largest population of
25	MAP infected animals.
26	And, one of the things that we learned

1	during the course of the discussions yesterday was
2	that on an average day an infected MAP animal may
3	put out up to $10^{-12}$ organisms per day, so it's a lot
4	of organisms.
5	Next slide.
6	It appears that the primary source of
7	MAP is infected cattle, but as I've said, there are
8	other animals certainly we need to have discussion
9	around, other domestic wild animals that I've
10	already mentioned.
11	We know that MAP has been isolated from
12	the environment, from water and from a variety of
13	foods, especially milk has been a primary focus,
14	because of the cattle, and ground beef. And, a lot
15	of the discussion that we had yesterday was
16	beginning to explore what other sources, foods, do
17	we need to consider as the subcommittee moves
18	forward in their deliberations.
19	Next slide.
20	The next few slides just go over what
21	the charge is to the Committee.
22	Before getting into this, I want to
23	just emphasize that the goal of this subcommittee
24	is really to focus on the question of the sources
25	getting into the food supply and mitigation,
26	potential mitigation, steps that could be exercised

1	in the rood supply to remove those to remove
2	MAP.
3	Very specifically, the subcommittee is
4	not getting into the issue of whether MAP is a
5	human pathogen. While that's clearly an
6	interesting exercise, and many of the folks around
7	the table yesterday were trying to pursue that, we
8	really were focused on the food aspects of this,
9	and distinctly making the decision that our role
10	was not to determine whether MAP is a human
11	pathogen, even though, obviously, that has to
12	integrate in the overall thinking of MAP.
13	So, the charge to the subcommittee
14	firstly, what food, water and environmental sources
15	are of the most concern with respect to exposure to
16	humans?
17	Secondly, what are the frequencies and
18	levels of MAP contamination found in the above
19	sources?
20	Thirdly, what is the efficiency of the
21	current methods of detection for MAP?
22	Now, I just want to digress on that one
23	a little bit, because it was very clear during the
24	discussions that methods to tag MAP was a key area
25	that we needed to focus on. The methods have
26	evolved over a period of time, but the vast

1	majority of them, if not all of them, are focused
2	on detecting MAP in sick animals, as a veterinary
3	diagnostic. They are not focused on detecting MAP
4	in food, and they've been adapted by many
5	researchers to do that, but we have a lot of
6	questions around the validity of those methods.
7	The fourth charge is what processing
8	interventions are available for foods of concern,
9	to eliminate or reduce the levels of MAP
10	contamination to an acceptable level, or to ensure
11	that MAP doesn't enter the food supply?
12	Next slide.
13	The fifth point, what are the research
14	needs to determine, (A) additional sources of map;
15	(B) the frequencies and levels of MAP contamination
16	in specific sources of concern; (C) potential
17	processing interventions to eliminate or reduce the
18	levels of MAP contamination; and, (D) potential
19	processing interventions to prevent MAP from
20	entering the food supply.
21	And then finally the sixth charge is,
22	really, just open ended, in terms of other
23	additional research needs to help address the
24	charge.
25	The Committee, as I said as I was going
26	through this, had a very good discussion yesterday.

1	I think that the focus really was on data needs.
2	There are a lot of references on this. As I've
3	said, most of the focus to date has been focused on
4	milk, and it was very clear during early
5	discussions that it needs to broaden way beyond
6	milk, and part of the goal of the subcommittee is
7	to gather the references, review them, and develop
8	a sense as to where the science is to answer the
9	charge.
10	We were lucky yesterday to have a
11	couple of experts who were part of the audience for
12	the subcommittee meeting, who very generously gave
13	presentations spontaneously for us, and that was a
14	huge help, and clearly, we are going to need to
15	rely on experts, both within the subcommittee and
16	outside.
17	That really concludes my formal
18	comments. I would certainly, first off, ask if
19	there are any members of the subcommittee who were
20	part of the discussions yesterday have anything to
21	add to what I've said?
22	And then, I think we can go on to the
23	next slide, open for questions generally.
24	Thank you.
25	VICE-CHAIR BRACKETT: Questions for Dr.
26	Acheson? No questions, okay.

1	Interestingly, at this time we are
2	scheduled to go to a break, but unless there's any
3	objections I would propose that we charge forward
4	and go on to the next subject. Anybody object?
5	Okay, next up we have Dr. Dan Engeljohn
6	of the Poultry Cook Subcommittee, who is bringing
7	the subcommittee document titled, "Response to the
8	Questions Posed by FSIS Regarding Consumer
9	Guidelines for the Safe Cooking of Poultry
10	Products," and he's bringing this to the full
11	Committee for consideration and adoption.
12	Dan has been under considerable
13	pressure to work his group extra hard, to complete
14	their document as it contains information critical
15	to FSIS' food safety programs, and the agency has
16	made the specific request of Dan to set a goal to
17	finalize the work at these March, 2006 meetings.
18	Dan has provided draft versions of the
19	document to the subcommittee and to the full
20	Committee for review and comment, and to assist in
21	its development.
22	The work is timely, because of the need
23	for FSIS to immediately consider the
24	recommendations in the report, specifically, there
25	is a current outbreak associated with a raw breaded
26	poultry product, as is addressed in the report, and

1	there is an urgent need for FSIS also to convey
2	safe poultry cooking procedures to consumers and
3	the industry regarding avian influenza.
4	And, with that, I will turn the floor

over to Dr. Engeljohn for a discussion.

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DR. ENGELJOHN: Thank you very much.

And first, Dr. Brackett, I'd like to say thank you to my eight other subcommittee members, they worked very hard, and we had three face-to-face meetings in which the majority of the subcommittee members were actually in attendance and provided constructive and helpful input, and then members of the full Committee also attended subcommittee working the group meetings and provided valuable input. So, we were fortunate to have of individuals а group who engaged in this process and were quite constructive in getting this document in the shape that it is in for today for adoption.

I'd also like to identify that we had a number of technical resource experts to join our working group meetings to provide input, and I will name them, just so I can have their names in the record. Kevin Elfering from the Minnesota Department of Health and Agriculture was asked to come to the first subcommittee meeting on this

1	subject, to provide information about a current
2	outbreak that was occurring last year at the
3	beginning of the year in the State of Minnesota,
4	with the type of product that is involved in an
5	outbreak at this time, which that is a raw poultry
6	product that's encased in a breading for which the
7	product appears to be ready-to-eat, but is not.
8	And so, he provided valuable input about the
9	outbreaks that his state had uncovered on two
10	different occasions in the past.

And then in addition, from the FSIS staff, Paul Uhler came to the meetings and ran the laptop and provided the assistance of getting the documents typed and edited.

And then, Diane Van from the USDA Hotline staff, a Home Economist, provided valuable information about how consumers handle these types of products, as well as general information about consumer behavior, as she is understanding it by the questions that come in to her hotline staff. It's also her staff that provides information to consumers. So, her input was quite valuable to this subcommittee, in understanding what type of information would be helpful to the consumers, and what kind of information has been conveyed to them.

And then, from the labeling staff at

1	FSIS,	Dr.	Robert	Post	and	Rosl	yn Mı	ırphy	y-Jenl	kins
2	provid	.ed	example	s o	f	labels	s a	nd	cool	king
3	instru	ction	s for	the s	ubcom	mitte	e to	rev	iew,	and
4	have s	ome ı	understa	nding	about	t the	label	ling	poli	cies
5	that t	he ag	ency has	5.						

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And then, Dr. Faye Bresler, from FSIS, also provided the subcommittee with information about the epidemiology investigations that have occurred with some of the outbreaks.

So, as technical resources, this group of individuals was quite helpful I think to the subcommittee.

did face-to-face We have three meetings, as well as electronic communication of the documents, along with sharing those with the full Committee, and so at this time I'm not aware of any substantive edits or concerns that have been identified by any Committee member. We did spend a great deal of time editing this document Wednesday, and we think we did a really good job capturing all the edits, that if this document is adopted today the intention is to submit it for peer-review publication, and we do know that there will be edits needed for any type of publication, and that if the Committee is in agreement we will make those types of minor edits on a case-by-case

1	basis.
2	I also want to point out that we did,
3	as an agency, FSIS, identify seven questions,
4	similarly, to what the seafood group was asked to
5	answer with regards to what is the safe cooking
6	temperature, as well as practical guidance as to
7	how to determine that the product is safe.
8	And, the final document that we have
9	put together has six main points that I'd like to
10	just summarize for everyone to have a good
11	understanding.
12	The document does identify a minimum
13	internal product temperature of 165 degrees for the
14	microbiological safety of poultry, as to be
15	achieved by the consumer in their preparation
16	practices.
17	This document does make clear that food
18	establishments that operate under Federal
19	inspection or state inspection, as an example,
20	continue to have the flexibility that they need in
21	order to produce a safe product, and that they may,
22	in fact, have lower time and temperature options to

n achieve the same level of safety that we provided to the consumer, with the minimum internal product temperature of 165 degrees.

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We've also identified that there is a

need	to	prov	ide	to	the	con	.sume	er e	evid	enc	e t	hat	the
produ	ıcts	tha	аt	may	, ar	opear	r ·	to	be	r	eady	y-to	-eat
conta	ins	unc	ooke	ed	or :	raw	pro	duct	Ξ,	in	th	is	case
poult	ry,	if,	in	fac	t, t	this	is	the	ty	ре	of	pro	duct
that'	s be	eing	dist	trib	uted	l.							

The outbreaks that have been associated with the types of products that the Committee focused on all revolved around the issue that the consumer really was not able to discern that the product was not-ready-to-eat because it appeared to be ready-to-eat.

And, the labeling was confusing to many of the consumers, as well, the cooking instructions, even if followed in some cases, would not achieve the desired or necessary level of microbiological safety, and so there's a need for more accurate validated cooking instructions.

There's also a need to ensure that the practical validated cooking instructions are, in fact, based in some part on evidence that the consumer will likely follow the guidance that's in the cooking instructions. It's one thing to tell the consumer to cook their product to 165 degrees and provide a variety of means to do so, but if the instructions are confusing, or complicated, or not practical, they still likely will not follow them,

and in many cases may not have temperature
neasuring devices available to them to check the
emperature. And so, it's essential that
anufacturers have validated practical cooking
nstructions, and so the document expresses a need
or the agency to provide such guidance to the food
processing industry.

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We also want to point out that although when we began the work of this subcommittee, in terms of our charge, the agency did ask us to look at the primary microbiological pathogens of public health concern, and identified Salmonella as the primary organism, also identified Listeria, because with ready-to-eat products Listeria monocytogenes is known to be a contaminant of the post lethality treated product.

time Αt the that (we) began deliberations, avian influenza was not a central focus, particularly, here in the United States, although it was something that we were tracking in terms of what was happening in the international community. But, since we began our work on this particular charge, it has become a more urgent identify what, in fact, issue to is а safe temperature to cook poultry to, should that virus be present, and this document does identify that

the 165 degrees, which we have identified in this document to be the appropriate temperature for microbiological safety, is established with Salmonella as the target organism, but that this temperature exceeds that which is necessary to adequately destroy avian influenza virus if it's present. So, we do make mention of that issue within this document.

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And then finally, the document does identify although that we are providing instructions that are valid to the consumer, to the food processor, making more evident that product is not ready-to-eat when, in fact, it appears to be so, and that the safe microbiological temperature to be achieved will, in fact, result in a product that may not reach the desired level of doneness that consumers are used to having with their cooked poultry products. And so, document does identify that it is important to at least convey that there's a distinct difference between achieving microbiological safety through an endpoint temperature, which is a minimum internal temperature of the product, and doneness. And so, there is a descriptor in there, in the document, about what doneness is, and some quidance to the agency of how to address that issue when consumers

ask about that particular issue.

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So, with that, I'd like to say that the agency, as Dr. Brackett noted, has identified that this document is quite timely. We do have a current outbreak on this same type of product initiated the charge for the subcommittee to begin work, and we have given the industry a timetable of resubmitting labels to the agency by May 1 of this year. And so, with that, this document contains the type of information that would be extremely valuable to them in development new labels for their products that more clearly articulate to the consumer whether or not the product is a not-readyto-eat product that contains raw poultry. contains information about appropriate use of a microwave when processing a frozen raw chicken product, and then importantly, it information about validated cooking instructions.

So, the agency's intention will be that if this document is adopted that we will quickly convert it into a compliance guideline that would provide instructive information to our industry, in order to comply with the labeling requirements that the agency has put in place as a consequence of the recall that we asked for last week, and then begin the process of also conveying to the consumer

1	important food safety information about how to
2	properly prepare their poultry products for
3	microbiological safety.
4	And then finally, it is the intention
5	to publish this document in a peer-review journal,
6	and as I said earlier, we know that we may need to
7	make some edits to the document in order to comply
8	with the formatting requirements of the peer-review
9	journal, and that if the Committee is in agreement
10	we will make those types of changes.
11	So, with that, I will close with my
12	review of what the subcommittee has done, and
13	entertain any questions.
14	VICE-CHAIR BRACKETT: Are there any
15	further questions for discussion regarding the
16	document presented for adoption here?
17	Dr. Kvenberg?
18	DR. KVENBERG: John Kvenberg, Food and
19	Drug Administration. Just a point of information,
20	and a request, in that I noted that the document,
21	if it is passed by the full Committee, will be
22	submitted to the agency on or about May 1. Did I
23	understand that correctly? For FSIS, the point of
24	information is, and I know some of you may know
25	this, the Conference for Food Protection is

scheduled to meet in Columbus, Ohio in mid April,

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1	so take	into	consid	leration,	perh	aps,	the :	final
2	document	discus	ssions	between	agenc	ies, a	as we	are
3	both repr	resente	d at th	nat parti	cular	organi	zatio	a.
4		For	those	of vou	that	don't	know	the

For those of you that don't know the Conference of Food Protection deals with retail and food service operations, and I think this document, if passed, would be of great interest at meeting, prior to formal submission in May, if I understood you correctly.

Thank you.

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DR. ENGELJOHN: Thank you, Dr. Kvenberg, and I will make one clarification. The May 1 deadline that I identified was the date by which food processors who have approved labels that are inspection have to resubmit under Federal labels to the agency by May 1.

And so, there's a need to get them this information prior to that time. And so, this could be something, Dr. Brackett, that we may need to agree upon, but from the agency's perspective, although we intend to take this document if adopted this morning and convert it into compliance guidelines, it would be prudent, if possible, to post the document as is, as a document adopted today, if it is, on to our website as quickly as possible, meaning in a matter of a day or days, so

1	that it is available to the public and to the
2	industry as additional context.
3	And then, on the issue that Dr.
4	Kvenberg raised about the Conference of Food
5	Protection, we also know that we, FSIS, will need
6	to work with FDA as a matter of policy principle
7	for the Conference for Food Protection, in that the
8	Food Code, we know, does identify a cooking
9	temperature of 165 for 15 seconds for retailers and
10	restauranteurs that comply with the Food Code, and
11	there will be a need to work together to change
12	that in the Food Code in order to make it
13	consistent with the consumer guidance which we are
14	giving, which is 165 degrees with no dwell time.
15	So, there is that inconsistency that we are aware
16	of.
17	We do identify that in the document as
18	an inconsistency and something that we'll work
19	together to ensure the Food Code is modified if
20	appropriate.
21	So, thank you for that input, and we'll
22	make sure that this is available prior to that
23	meeting as well.
24	VICE-CHAIR BRACKETT: Okay, thank you.
25	Dr. Morse?
26	DR. MORSE: My question, actually,

1	refers to the two previous comments, the
2	discrepancy on page 18 in the last paragraph before
3	the conclusions of the difference in the
4	temperature requirements, and I just wondered if
5	there could be some further elaboration on the
6	basis for these differences, specifically, were
7	there any differences in the scientific data that
8	was reviewed by the two to come to different
9	conclusions, or did the Food Code not have the
10	benefit of this data that was looked at by this
11	Committee? It refers on page 13 to, I guess, a
12	table, and I wasn't sure the tables were available,
13	just looking at what temperature was adequate.
14	DR. ENGELJOHN: Yes, thank you, Dr.
15	Morse.
16	On that particular which is the
17	issue related to the Food Code temperature of 165
18	degrees for 15 seconds, versus the 165 degrees with
19	no hold time for consumers.
20	I would say that the Food Code has the
21	values of 165 for 15 seconds for some time now, and
22	the information that the subcommittee reviewed with
23	regards to the 165 for no hold time is based on
24	more current research that the Agriculture Research
25	Service at USDA, particularly, has done on

establishing D values for Salmonella in cooked

1	poultry products.
2	And so, we have more current
3	information that we are relying upon here for the
4	consumer information, and then for the processors,
5	such as restauranteurs and institutions, this would
6	be a matter where we think we can just make that
7	change.
8	It would also make it more consistent
9	with what we also have in our Federal regulations
10	for inspected facilities, and there is always the
11	goal to make the Food Code consistent with Federal
12	regulations and other more current science.
13	So, I think it's just a matter of more
14	current science and better information available
15	than it is in terms of differing science that's the
16	basis.
17	DR. MORSE: Just to follow up, and so
18	the mechanism, would this still have to be reviewed
19	the same data would have to be reviewed by the
20	Conference for Food Protection, and they'd have to,
21	I guess, review this to make the same conclusion,
22	would that be the next step?
23	VICE-CHAIR BRACKETT: John, do you want
24	to address that?
25	DR. KVENBERG: Thank you, John Kvenberg,
26	Food and Drug Administration. That's correct. The

1	way the council is set up, it would be Conference
2	for Food Protection has three councils, the third
3	of which is the Science Council. I think Dr. Zink
4	may be involved in that from the FDA's standpoint.
5	Relative concerns you may have on instantaneous
6	temperature versus 15 seconds, I think the science
7	wills out, and will be presented, at least that in
8	that format initially, I guess it's a question,
9	Dan, only to the point I want affirmation of this
10	is, the heat dynamics of achieving 165 degrees
11	account for come-up time and cool-down time, so the
12	new science that basically is being generated takes
13	into consideration lethality going up and coming
14	down, and that's sort of the gist of the scientific
15	information we've in the ARS work, and that's the
16	current information you are referring to.
17	So, that's just the affirmation, I
18	wasn't on your group, is that correct?
19	DR. ENGELJOHN: That's true, and I will
20	point out that the ARS research that we relied upon
21	in the subcommittee, specifically, dealt with
22	and actually it is addressed here in more depth in
23	the document, but the research actually shows that
24	it's 165 degrees for less than ten seconds, and we
25	clarified in this document, for all intents and

purposes that is the equivalent of an instantaneous

2	By the time you take the temperature,
3	you will have achieved at least ten seconds, and so
4	it actually is for less than ten seconds.
5	DR. KVENBERG: Thank you for the
6	clarification.
7	VICE-CHAIR BRACKETT: Dr. Madden, you
8	had your flag up?
9	DR. MADDEN: Yes, Joseph Madden.
10	One concern I have is also a difference
11	in the Food Code for egg products versus poultry
12	products, and this document doesn't really address
13	egg products, but I'm concerned about the term
14	"poultry products" may be all encompassing,
15	considered all encompassing by consumers. So, my
16	concern there is that if egg products are brought
17	up to a temperature of 165, they may be
18	unpalatable. You address it for 165 degrees, maybe
19	leaving a rubbery texture in some meat products,
20	but there is nothing about a statement for egg
21	products.
22	DR. ENGELJOHN: Thank you, Dr. Madden.
23	I will say that for although as a
24	bureaucrat we do distinguish things differently,
25	and it doesn't mean that we shouldn't make more
26	effort in providing better information to the

temperature, no dwell time.

1	consumer.
2	For the purposes of how we conveyed our
3	information and dealt with this particular topic,
4	poultry here means poultry meat as opposed to an
5	egg product that would be derived from poultry.
6	And so, we typically handle poultry and eggs as
7	separate entities.
8	And, I do think that in terms of
9	guidance to consumers we certainly can, in fact,
10	make some distinctions in what the agency conveys,
11	particularly, to consumers that there is a
12	difference between the egg and the poultry meat.
13	And, we didn't deal with what is the
14	safe temperature for eggs. That could be another
15	charge for another day, but right now I think we
16	can certainly make some distinctions for the
17	consumer guidance that we put forward.
18	VICE-CHAIR BRACKETT: Dr. Madden?
19	DR. MADDEN: Joseph Madden, thank you
20	for the clarification, Dr. Engeljohn.
21	I commend the subcommittee for bringing
22	up the subject of thermometers, and proper
23	calibration of them, and I'm just wondering if we
24	are going to go on in this regard and possibly
25	another subcommittee to address that issue, or

something else, does the subcommittee have any

i i i i i i i i i i i i i i i i i i i	1	recommendations	in	that	regard
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DR. ENGELJOHN: I would say that we
touched on the issue of what does the consumer use
when they take temperatures, and we actually got
into the debate of, should we be referring to this
document throughout as a thermometer or as a
temperature measuring device.

We actually use both terms in the document, because from our consumer hotline at USDA, where consumers call in and ask questions, we are finding that our consumers actually are more sophisticated in their understanding about food safety than they were a few years ago, and that they do have access to temperature measuring devices that, in fact, can be calibrated.

And so, we do, in this document, make recommendations to the agency that we need to focus on providing better information about how to have a consumer who can't calibrate their thermometer actually know that their thermometer is registering properly at a hot or cold temperature. And then, if they have a temperature measuring device that's capable of being calibrated, and they are, in fact, becoming more available to the consumer, of how to do that and more information on it.

And, I think from the perspective of

the subcommittee's work, and they can certainly correct me, but we did actually provide some research needs and some additional things that could and should be done, and I think that there also was, in fact, a direction to the agency that we need to follow up, FSIS, with some type of a measuring tool to ensure that the consumer guidance and industry guidance that we are providing is effective. It's not enough just to say we are going to give new information to the consumer, we realize this is probably new information that will be confusing, and so there is a need to ensure that our consumer messaging and industry guidance is effectively doing what we intend.

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And so, I will say that FSIS likely will, and my hope will be that we do, follow up over the course of time with measuring what consumers are doing, the temperature measuring devices you raised is one that's of particular interest to us. We, in fact, had conducted an "Is It Done Yet" campaign, and it's mentioned in this document, it is one where we provided information to consumers, and then did a pre and post test to measure their understanding if there were changed behaviors, or at least changed understanding, and found that that was an effective way to gauge

1	whether or not our messaging was working.
2	And, I think as you suggest, we would
3	likely do the same thing with the thermometer.
4	And, if we find that there is need for more
5	guidance from this scientific Committee, that would
6	be the type of thing we would consider coming back
7	with a new charge at another day.
8	VICE-CHAIR BRACKETT: And, I have
9	written that down as a future item for
10	consideration by the Executive Committee.
11	Do we have any other questions for Dr.
12	Engeljohn?
13	Dr. Acheson?
14	DR. ACHESON: Dr. Engeljohn, two
15	comments, and this actually relates to page four of
16	the document, where you've sort of summarized, I
17	think, where you ended up.
18	On the third bullet, I'm talking about,
19	roughly, lines 9 through 12, I think the gist here
20	is, don't rely on microwaving alone to achieve
21	doneness.
22	When I read this I thought, well, is
23	this going to potentially confuse the consumer, in
24	terms of that it would suggest that they shouldn't
25	use a microwave to thaw a product prior to cooking.
26	DR. ENGELJOHN: Thank you.

1	In the document, we actually do have
2	some discussion about, first of all, when
3	conducting their validation for cooking
4	instructions, the food processor first needs to
5	know what the consumer is going to do. And if
6	cooking from the frozen state, and the use of a
7	microwave is, in fact, what is likely going to
8	happen, this document does say that one
9	consideration to reduce vulnerability, at least in
10	terms of ensuring that the intended endpoint
11	temperature is achieved, is to also investigate
12	whether or not the product should, in fact, be
13	thoroughly thawed before it is, in fact,
14	microwaved.
15	And, the document does actually
16	identify that as an option, and then goes into the
17	issue of, if doing so, then there's a need to
18	ensure that appropriate guidance to the consumer or
19	how to safely thaw the product should be conducted.
20	DR. ACHESON: Okay.
21	DR. ENGELJOHN: So, we've included that
22	in the document as well.
23	DR. ACHESON: Okay.
24	This is David Acheson again. I just
25	wanted to make sure that we didn't give the
26	impression to the consumer that actually using

1	their microwave to thaw products was the wrong
2	thing to do. That was my concern on that.
3	The second point is, moving down a
4	little bit, line 26, where recommendations to the
5	food processor is to validate cooking instructions,
6	when validating cooking instructions or labeling
7	the processor must take into account a variety of
8	issues.
9	It struck me reading that, that the
10	variables of what consumers may do is infinite, and
11	the suggestion here is that if the food processor
12	doesn't explore this to some infinite degree they
13	have not reached a point of satisfaction for the
14	agency.
15	Do you need to put some arms around
16	that in terms of what's expected, as you may issue
17	guidance on this? It just reads as a very open
18	statement, in terms of
19	DR. ENGELJOHN: I would say, and thank
20	you, Dr. Acheson, these are just bullets that
21	summarize the more in-depth discussion that
22	actually is in the document, but the agency clearly
23	has informed the industry, particularly, the
24	industry that produces a raw poultry product that
25	appears to be ready-to-eat that is not, and that is
26	frozen, is the causative product, it is the product

that	has,	in	fac	t, be	en	asso	ciate	ed	with	three	known
outbr	reaks	in	the	very	re	cent	peri	od.			

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And so, on that issue alone, one of the from this document, and what things that discussed in the subcommittee, the agency likely will, in fact, develop more guidance on this, but one means by which that can be addressed is that, more can be done with capturing consumer feedback to a manufacturer by providing an 800 number, as an consumer to inform example, for a the food that when following the processor cooking instructions they found the product not to be to achieve palatable, or not the desired organaleptic or aesthetic qualities that intended or would like to have, and that as a consequence they would reduce the cooking time the next time if they used a microwave.

That is extremely important information to that manufacturer to use in knowing how consumers use their product. And, I would just point out that from the agency's perspective, the HACCP regulations actually require the manufacturer to have information about the intended use of the product. We know that this particular type of product involved in the outbreaks is one for which the consumers, first of all, don't have good

1	information about whether or not it's raw or not,
2	and the cooking instructions may, in fact, not be
3	practical. And so, from that perspective, we are
4	identifying as guidance in this document, and in
5	recommendations to the agency, that we need to
6	pursue better means to gather that kind of
7	information to use as feedback.
8	Clearly, having practical cooking
9	instructions is important. It's not enough just to
10	say, cook it to an endpoint temperature, and then
11	follow this host or variety of instructions that
12	may or may not be followed. You need to get more
13	information, and on this product in particular, and
14	this document does suggest that that is something
15	that needs to be done.
16	DR. ACHESON: Thanks for the
17	clarification.
18	VICE-CHAIR BRACKETT: Dr. Morse, an
19	additional comment, question?
20	DR. MORSE: Thank you.
21	I seem to be asking follow-up questions
22	to just the previous ones.
23	I was also interested, in light of the
24	outbreaks that occurred and the Committee
25	recognized the importance of labeling on foods, so
26	that the consumer is confused whether they are

1	really cooked or not, and the labels such as
2	"ready-to-cook," where they may think it's already
3	been cooked. And so, this is more of an
4	implementation question, sort of a follow-up of
5	what the agency touched upon already a little bit.
6	But, I guess the question, in light of
7	the outbreaks, what kind of enforcement or
8	regulations will take place to try to prevent this?
9	You mentioned something earlier about a May $1^{\rm st}$
10	deadline for labels, so is there going to be like a
11	review of labeling of these products by companies,
12	and some kind of action taken to improve that?
13	DR. ENGELJOHN: Yes, and I would just
14	suggest that rather than give you a lot of details
15	in this Committee on that, I will say that on the
16	agency's web page we have posted the letter that we
17	sent to the manufacturers who produced these kind
18	of products what they need to do by May 1.
19	This document, in and of itself,
20	actually provides much of the support that the
21	industry could, and should, likely be following in
22	order to meet the agency's expectations.
23	Within this document, the subcommittee
24	has identified that it would be prudent, as an
25	example, that for products that are raw, that
26	appear to be ready-to-eat, or at least contain a

raw product, that it would be critical to put on
the principal display panel an identifier that
says, contains uncooked poultry, or contains raw
poultry, for safety must be cooked to a minimum
internal temperature by measurement of a
thermometer, I think is the language we actually
used in the document.

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That was intended as guidance to the agency, as one way to convey to the consumer that the labeling, using the terms "ready-to-cook" is to some extent ambiquous and confusing to explicit consumer, and that more labeling is needed.

So, the document actually does have some suggestions in there, such as that, to be considerably more explicit about the presence of an uncooked or raw product in a product, particularly, that appears to be ready-to-eat.

So, the agency will take this guidance, right now we instructed the industry what they can and should do by May 1<sup>st</sup>, we will continue to pursue whether or not there's a need for more aggressive regulatory fixes, or whether or not this corrects itself through the guidance that we think this document provides to the industry and to the agency.

1	VICE-CHAIR BRACKETT: Dr. Kvenberg?
2	DR. KVENBERG: John Kvenberg, Food and
3	Drug Administration.
4	And, I guess one point on page four
5	again, on the second bullet under food processor,
6	which deals with the recommendation we are dealing
7	with here, it has to do with assuring elimination
8	of Salmonella, being the most heat resistant
9	pathogen of public health concern that's coming out
10	of raw poultry.
11	I note that the sentence after there in
12	brackets, I guess you would call it, says,
13	"Although Listeria is more heat resistant, it is
14	considered a hazard from post processing
15	contamination rather than under cooking." I'm
16	trying to put together, to understand for
17	clarification, how we regulate foods that are
18	ready-to-eat versus those that are not-yet ready-
19	to-eat, and the role of cooking instructions, not
20	only for advice to the consumer, but how we view
21	these foods.
22	If a food did contain other organisms,
23	such as Listeria monocytogenes, but had cooking
24	instructions supplied on it, and it was
25	demonstrated that Listeria monocytogenes didn't
26	survive the provided cooking instructions, where

1	does that leave the industry and everyone relative
2	to that kind of situation, considering this
3	recommendation deals with Salmonella?
4	DR. ENGELJOHN: There is more
5	discussion, I think, beginning on page 13 of the
6	document, but the issue became one of consumers
7	need information about how to safely prepare their
8	products and prevent cross contamination. That's
9	one thing. And so, the document does deal with
10	that to some extent.
11	For the purposes of providing clear
12	validated cooking instructions, the products that
13	we are dealing with in this particular charge
14	related to cooking poultry from the raw state or a
15	partially cooked poultry, and that it is important
16	to address all those pathogens, although Listeria
17	is more resistant to heat than Salmonella, it also
18	generally is there in lower numbers than
19	Salmonella, and that the research the agency relied

So, for the lethality treatment,

that's undergoing the lethality treatment.

**NEAL R. GROSS** 

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upon in establishing its requirements for food

processors did, in fact, identify that a seven log

reduction for Salmonella is more than adequate to

deal with the expected level of Listeria that would

be on the raw product or the precooked product

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Listeria,	the	inte	ntion	her	e is	to	i	dent	ify
Listeria	as not	the	issue,	in	terms	of	the	targ	get
organism,	even t	hougl	h it's	mor	e resi	stan	ıt,	it,	in
fact, woul	ld be ac	dequa	tely de	stro	oyed.				

to-eat, but are adequately labeled as such, for which a nominal heating treatment is required, and the cooking instructions only need to be adequate to deal with the expected level of contamination that's there. So, what's provided in this document is really geared at the level necessary for raw poultry product, which would require a seven log reduction for Salmonella. That's what is required of the industry, and then the 165 instantaneous was deemed to be the equivalent for what we would provide to the consumer.

So, if it's a partially cooked product, or something that just needs a nominal cook for Listeria, then a lesser degree of lethality is appropriate.

DR. KVENBERG: So, if I can just follow up for the purpose of people who regulate foods and those who produce it, where does this leave us relative to foods that are, say, frozen, not-ready-to-eat, with cooking instructions on them, relative to the status of a food that's examined at that

1	level with the presence of an organism like
2	Listeria monocytogenes that was recovered?
3	DR. ENGELJOHN: If I can understand your
4	question correctly, if Listeria was present on that
5	type of product, a not-ready-to-eat product, is the
6	question should the are the cooking instructions
7	intended to be sufficient to deal with that level
8	of Listeria?
9	DR. KVENBERG: In general, that's the
10	question I'm asking, since we have a risk
11	assessment saying that the Listeria is not
12	necessarily a very low level infectious organism.
13	Where are we going as a Committee in this
14	recommendation, because if a food is found to be
15	positive for the organism, and you have cooking
16	instructions, do you look at it after lethality
17	treatment for purposes of whether or not the
18	product represents a hazard?
19	DR. ENGELJOHN: I see.
20	From the purpose I can tell you the
21	perspective of FSIS on this issue. FSIS would not
22	be looking at measuring or detecting the presence
23	of Listeria on a product identified as not-ready-
24	to-eat. That would not be the type of product that
25	we would be pursuing, in terms of what level of

contamination likely would be present, because it's

1	considered to be a not-ready-to-eat product. And
2	so, the cooking instructions, therefore, for that
3	product, because there would be a lethality
4	necessary, would need to be appropriate so that the
5	end product would have non-detectable levels of
6	Listeria.
7	So, the cooking instructions would need
8	to be representative of what likely would be
9	present, but it would not be a type of product that
10	FSIS, as a regulatory agency, would pursue. We
11	would pursue those products that are labeled as
12	ready-to-eat, we would expect that there would be
13	no detectable Listeria there. That is the product
14	we focus on. This would absolutely not be the type
15	of product, this product that appears to be ready-
16	to-eat but contains a raw product, would absolutely
17	not be the type of product that as a regulatory
18	agency FSIS would focus upon, if that answers your
19	question.
20	DR. KVENBERG: Thank you.
21	VICE-CHAIR BRACKETT: Any other
22	questions?
23	Well seeing none, I would like to now
24	ask, considering there are no more questions, for a
25	motion to accept the document as presented, and
26	please state your name when you do this for the

1	record.
2	DR. WESLEY: I so move.
3	VICE-CHAIR BRACKETT: Okay, that's Irene
4	Wesley from ARS.
5	DR. WESLEY: I so move.
6	VICE-CHAIR BRACKETT: A second?
7	DR. SOFOS: I second.
8	VICE-CHAIR BRACKETT: Dr. Sofos, from
9	the University of Colorado
10	DR. SOFOS: Colorado State.
11	VICE-CHAIR BRACKETT: Colorado State,
12	I'm sorry, I should have known better.
13	Thank you very much.
14	Okay, having a motion to accept the
15	document and a second, all those affirm by say aye.
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16	(Ayes.)
17	(Ayes.)  VICE-CHAIR BRACKETT: Opposed?
17	VICE-CHAIR BRACKETT: Opposed?
17 18	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document
17 18 19	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document is accepted, and as was recommended that we will
17 18 19 20	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document is accepted, and as was recommended that we will put that on the website, is that correct, as an
17 18 19 20 21	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document is accepted, and as was recommended that we will put that on the website, is that correct, as an accepted document, and I do want to thank you all
17 18 19 20 21 22	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document is accepted, and as was recommended that we will put that on the website, is that correct, as an accepted document, and I do want to thank you all very much for this. I especially thank Dr.
17 18 19 20 21 22 23	VICE-CHAIR BRACKETT: Opposed?  VICE-CHAIR BRACKETT: Okay, the document is accepted, and as was recommended that we will put that on the website, is that correct, as an accepted document, and I do want to thank you all very much for this. I especially thank Dr. Engeljohn for your excellent leadership in getting

1	that I think what I would like to do is have maybe
2	a 15 minute break, allow people to get some coffee,
3	and allow our secretary to find out who all is
4	scheduled for the public comment.
5	So, if we could meet back here, it's
6	now 9:40 according to my watch, at 9:55, and we
7	will continue with public comments.
8	(Whereupon, at 9:42 a.m., a recess
9	until 10:02 a.m.)
10	VICE-CHAIR BRACKETT: This morning we
11	only have one commenter that has signed up, but I
12	will say that if there are others we will entertain
13	others as well this morning, but we want to make
14	sure.
15	The one commenter that I have a listed
16	here is from Robert G. Hibbert, for public comment,
17	and I would ask the commenters to please go up to
18	the podium, if they could, and use the microphone.
19	So, Mr. Hibbert (of McDermott Will &
20	Emery LLP, Washington, DC.), if you could come up
21	at this point.
22	MR. HIBBERT: Thank you, Mr. Chairman.
23	I don't know whether to be flattered or
24	intimidated by my solitary status here, but I have
25	just a brief comment, in which I probably would
26	like to embed a question I understand that's not

quite consistent with the format, but my comment
goes to, I think, the need for some sort of some
degree of regulatory certainty for manufacturers of
these products, assuming that the guidelines the
Committee has adopted are complied with. In other
words, if I am a manufacturer of one of the
products that the Committee has been entertaining,
and if consistent with FSIS' response to these
recommendations I go ahead and change my labels in
accordance with the provided validation, change my
labels, get those labels approved, and go forward,
the question I think becomes, what happens in the
unfortunate event that something goes wrong?
My assumption, and my hope would be,
that that relabeled, revalidated product,
essentially, has the same regulatory status as what
you might call an ordinary piece of raw poultry.
That is, if an ordinary piece of poultry, say a
chicken leg, is in the marketplace and is found to
contain Salmonella, even in the unfortunate
instance where that becomes associated with an

misbranded, and is not subject to recall or any 

other regulatory action.

product

that

It would be my hope that products that

is neither adulterated,

illness, my understanding of the FSIS position,

nor

1	comply with these guidelines wind up in the same
2	category, and whether and regardless of whether
3	my hope is realized or not, I think it's extremely
4	important for the agency to clarify for the
5	industry's benefit whether my assumption is
6	correct.
7	Thank you very much.
8	VICE-CHAIR BRACKETT: As I mentioned, we
9	do have some time this morning, too, and so at this
10	time I will ask if there are any others in the
11	audience that wish to make a public statement at
12	this time.
13	Mr. Corbo?
14	And then, when you get up, please
15	announce your name and your affiliation, and keep
16	your comments to ten minutes or less.
17	MR. CORBO: My name is Tony Corbo, and
18	I'm with the consumer organization, Food and Water
19	Watch (Washington, D.C.).
20	First, I want to commend the Committee
21	for taking up the issue of MAP (Mycobacterium avium
22	subspecies paratuberculosis). The consumer groups
23	meet on a regular basis with the management staff
24	at FSIS, and this has been an issue that we have
25	raised as a consumer concern.
26	And, from a personal standpoint, one of

1	my family members has been diagnosed with Crohn's
2	Disease, and I know that the Committee is not
3	taking that up as an issue, in terms of the linkage
4	between Johne's and Crohn's, but I think this is
5	significant in terms of the research that you all
6	are going to start doing on the issue, and so I
7	want to commend the Committee for taking this up.
8	Second comment, I had some specific
9	questions about the "Is It Done Yet" campaign that
10	was raised during the discussion on the safe
11	cooking instructions for poultry.
12	I'm holding up a refrigerator magnet,
13	very attractive. I picked up a stack of these at
14	the USDA Outlook Forum last month, and I've
15	actually mailed them out to family and friends
16	around the country. But, that was the only place
17	I've seen these. They are very attractive. They
18	have the safe cooking temperatures recommended by
19	FSIS for different types of foods, including
20	seafood. I don't know how you got that by Spencer
21	Garrett, but it's on there.
22	And, the thing is that, I don't know
23	what kind of outreach is being done, because this
24	is very useful. This is a very useful tool.
25	One of the things that I was interested
26	in is whether FSIS is reaching out to the Food

1	Network, for example. My wife and I, during
2	between Christmas and New Years, spent some time
3	looking at the various programs there, to determine
4	whether they were following the recommendations
5	that FSIS has in terms of safe food handling
6	techniques, and it's very rare that any of the
7	chefs on those programs follow those practices.
8	And, I would think that that would be a
9	good place for FSIS to start reaching out on the
10	use of thermometers, to get the chefs to talk about
11	the recommended cooking temperatures for the
12	various types of foods.
13	So, with that, thank you very much for
14	your time.
15	VICE-CHAIR BRACKETT: Thank you very
16	much.
17	I think I saw another Caroline Smith
18	DeWaal?
19	MS. SMITH DeWAAL: Good morning,
20	Caroline Smith DeWaal, with the Center for Science
21	and the Public Interest (Washington, D.C.).
22	First of all, I want to apologize for
23	missing most of the presentations this morning.
24	Kendra Johnson, from my staff, has been here most
25	of the week, but the challenge of actually finding
26	this location in Virginia proved difficult this

1	morning. So, I'm urging the Committee to move back
2	into Washington to a more central location.
3	But, on a far more serious note, while
4	I commend I join Tony in really commending the
5	Committee for a lot of the work it is doing right
6	now, and for finally coming to some congruence,
7	hopefully, on the poultry messages about cooking.
8	I think it's very important that as you
9	are advising your commissioners and your
10	undersecretaries on consumer messages regarding AI,
11	avian influenza, that you not rely on a cooking
12	message as your core message about AI.
13	While it is true, and the WHO has put
14	out information saying that cooked poultry does not
15	pose a risk, it is very important that the industry
16	work far before the kitchen in controlling the
17	hazard. We don't want the virus on raw poultry in
18	our kitchens. We want the poultry we want the
19	virus kept out of the processing plants. So, it's
20	really critical as you go out with consumer
21	messages that the messages on AI start far before
22	the kitchen in informing consumers about the risk.
23	Thank you.
24	VICE-CHAIR BRACKETT: Thank you.
25	Do we have any other requests for
26	public comment in the audience?

1	I see none, and so I will thank our
2	commenters for the comments that they've provided.
3	And, at this point, this does conclude
4	the end of the public comment period, and I do want
5	to thank all of the members of the Committee, and
6	especially the subcommittee chairs, for their hard
7	work on the issues that they discussed this
8	morning, and that they've done all week.
9	And, the fact that we have industry and
10	consumer groups at this meeting, and involved
11	actually every day, is an indication of the
12	importance of the work of this Committee, and it's
13	something that we very much appreciate.
14	So, at this time, I will call the
15	meeting adjourned and wish you all safe travels
16	home.
17	(Whereupon, the above-entitled matter
18	was concluded at 10:11 a.m.)
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